DOCUMENT RESUME

ED 176 090 CE 022 661

AUTHOR Watts, Harold W.; Skidmore, Felicity
TITLE The Implications of Changing Family Patterns and Behavior for Labor Force and Hardship Measurement. Background Paper No. 16.
INSTITUTION National Commission on Employment and Unemployment Statistics.
PUB DATE Jun 78
NOTE 77p.
AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock Number 052-003-00642-1)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Data Collection; *Economically Disadvantaged; Economic Factors; Economic Research; *Employment Statistics; Family Income; *Family Structure; *Labor Force; Manpower Utilization; *Measurement Techniques; Poverty Research; Social Change; Social Factors; Unemployed

ABSTRACT

Two major points are discussed concerning the implications of changing family patterns and behavior for labor force and hardship measurement. First, since household income is not restricted to the earnings of one individual, economic hardship cannot be measured by labor force statistics. Arguing that the poverty count is the appropriate measure of economic hardship, a recommendation is made for the collection of more detailed data on unearned household income and on taxes to improve the accuracy of the poverty count. Second, due to shifts in the demographic composition of the labor force and in the life cycle timing of education-work retirement, the use of traditional employment and unemployment statistics to measure the social costs of underutilization is viewed as being no longer valid. To fill these data needs, a recommendation is made for the regular collection of data on the productive uses of time by adults classified according to previous employment history. (JH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED176090

The Implications of Changing Family Patterns and Behavior for Labor Force and Hardship Measurement

Background Paper No. 16
June 1978

Harold W. Watts

and

Felicity Skidmore

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

National Commission on Employment and Unemployment Statistics
2000 K Street, N.W., Suite 550
Washington, D.C. 20006
(202) 632-7460

CE 022 661

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

Stock Number 052-003-00642-1

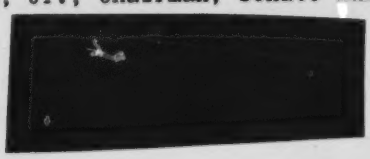
MEMBERS OF THE NATIONAL COMMISSION
ON EMPLOYMENT AND UNEMPLOYMENT STATISTICS

Members

Sar A. Levitan, Chairman, Research Professor and Director of Center for Social Policy Studies, The George Washington University, Washington, D.C.
Bernard E. Anderson, Associate Professor of Industry, The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania
Glen G. Cain, Professor of Economics, University of Wisconsin, Madison, Wisconsin
Jack Carlson, Vice President and Chief Economist, United States Chamber of Commerce, Washington, D.C.
Michael H. Moskow, Vice President for Corporate Development and Planning, Esmark, Inc., Chicago, Illinois
Rudolph A. Oswald, Director, Department of Research, AFL-CIO, Washington, D.C.
Samuel L. Popkin, Associate Professor of Political Science, University of California at San Diego, LaJolla, California
Mitchell Sviridoff, Vice President, Division of National Affairs, Ford Foundation, New York, New York
Joan L. Wills, Director, Employment and Vocational Training Programs, National Governor's Association, Washington, D.C.
Arvil V. Adams, Executive Director

Advisors

Ray Marshall, Secretary of Labor
Juanita Kreps, Secretary of Commerce
Julius Shiskin, Commissioner, Bureau of Labor Statistics, U.S. Department of Labor
Manuel Plotkin, Director, Bureau of the Census, U.S. Department of Commerce
James T. McIntyre, Jr., Director, Office of Management and Budget
Eli Ginzberg, Chairman, National Commission for Manpower Policy
Charles Schultze, Chairman, Council of Economic Advisers
Richard Bolling, Chairman, Joint Economic Committee
Jacob K. Javits, Joint Economic Committee and Senate Human Resources Committee
Carl D. Perkins, Chairman, House Education and Labor Committee
James M. Jeffords, House Education and Labor Committee
Harrison Williams, Jr., Chairman, Senate Human Resources Committee



This paper was prepared for the National Commission on Employment and Unemployment Statistics.
The author alone is responsible for the content.

CONTENTS

	Page
EXECUTIVE SUMMARY	v
INTRODUCTION	1
MAJOR TRENDS IN FAMILY PATTERNS AND BEHAVIOR	3
Increasing Labor Force Participation of Women	3
Multiple Earner Families	7
Volatile Family Composition	12
Growing Variation in Behavior at Various Life-Cycle Stages	14
MEASURES OF HARDSHIP AND DEPRIVATION	21
Chronic Versus Acute Hardship	21
The Measurement of Chronic Economic Hardship	26
SOCIAL WASTE AND OPPORTUNITY COST	30
Comprehensive Measures of Time Use	31
The Importance of Appropriate Measurement of Labor Market Resources	33
RECOMMENDATIONS	35
Needed Improvements in Measures of Economic Hardship	37
A Time Use, Employment and Unemployment Survey	42
Small Area Statistics	47
COMMENTS	
Janice Fanning Madden	59
Lee Rainwater	65

EXECUTIVE SUMMARY

One consequence of changing family patterns and behavior is that the relationship between individual earnings and household income has broken down. Most households have more than one earner. Many earners have no dependents. About 50% of poor multiperson households have no earners. But most of the rest have at least one earner (many of whom work full time all the time). In addition, the breaking off of persons who used to be dependents of primary families into households of their own has further weakened the correspondence. They are counted as separate units but a significant part of their incomes almost certainly comes from interhousehold transfers, which are not counted in their incomes but in the incomes of the unit they used to be part of. The link between unemployment and economic hardship should be broken. Measures of labor force status and utilization should be kept separate from measures of economic hardship.

Another consequence of trends in social behavior is that labor force activity can no longer be inferred from demographic and household status. There are full-time career workers among men, women, mothers, youths, and those over 65. There are also part time and in-and-out workers among all groups. The type of labor force participation to be expected from a worker or potential worker can be more accurately inferred from the past practice of that worker. In addition, the labor market value of that worker to society depends not on the fact that (s)he is offering to contribute productive time but on the value of the time as reflected by the wage rate (s)he can command.

We have three specific recommendations that flow from three basic conclusions: (1) In view of current social reality, economic hardship and the state of labor force utilization are distinct phenomena that deserve separate measurement. (2) Important advances in both concept and method have left our current measuring instruments well behind the state of the art. (3) For the important task of monitoring local hardship and employment conditions, making the best use of program reporting data collected on a current basis is more economical in both budget and public nuisance than would the alternative of a new sample survey capable of equivalent precision.

Recommendation I: Needed Improvements in Measures of Economic Hardship. The March Supplement to the CPS is inadequate for collecting information on the behavior and economic status of individuals and households. The most urgent improvements needed are data on in-kind benefits (both public and private) and transfers between households (both money and goods) into the measurement scheme. In addition, major improvements are needed in the measurement of some already covered components of money income. We recommend a longitudinal survey of 20,000-25,000 households. Each year a sample of 4,000-5,000 households should be drawn and every individual in them followed for five years. This means that in full operation there will be a total sample at any time of 20,000-25,000. The planned Survey of Incomes and Program Participation (SIPP) could possibly become the survey we are recommending, but as currently planned it will fall short of our objectives. First, SIPP does not provide longitudinal data for as long as we feel is necessary--five quarters as against five years. Second, it is focused on participation in public programs and on the transfers provided by them to

the relative neglect of the interhousehold transfers we feel are so important.

Recommendation II: A Time Use, Employment, and Unemployment Survey. Our existing labor force statistics are losing their relevance and, therefore, their value as changes take place in the interrelation of households and family structure with the labor market. The first objective is to get information on current productive time use of all adult persons. We propose the following categories among which hours in a sample week can be distributed: (a) market work, (b) work in the home, (c) child rearing, (d) school and other training, (e) job seeking. The second objective is to collect enough information to permit the classification of adults on the basis of their previous paid work experience. We suggest the following categories: (a) labor force entrants (those aged 21-71 who took their first full-time job within the last three years), (b) prime labor force (those aged 21-71 who have worked full time at least 36 out of the past 60 months), (c) inactive adults (those aged 21-71 who have not worked in the past two years), (d) other experienced workers aged 21-71, (e) other workers (residual in the 21-71 age category, (f) youths (all those 16-20 years of age), (g) elders (those over 72 years of age). In addition, we propose the classification within each category of worker by wage rate (low, medium, and high) in order to gauge the amount of net productivity represented by those seeking changes in the amount of their paid employment. This sort of survey could be carried out within the basic framework of the Current Population Survey, but we recommend that a careful study be undertaken to consider whether a substantially different design would be more effective in gathering this type of time use and work experience data.

Recommendation III: Small Area Statistics. We recommend that program data from the Food Stamp program, possibly with additional questions concerning labor force status, be explored for its potential as the source for such data. We are not suggesting that the Food Stamp program data as current collected provide adequate local area information. What we are suggesting is that the Food Stamp program is a uniform, countrywide income-conditioned transfer program--the only one in this country. Legislation passed in 1973 prohibits any local discretion in eligibility criteria, benefits levels, or regulations. There is a ready-made administrative sturcture in place, already collecting data. To the extent that the data need supplementation, the procedures are sloppy, or the data collection forms are idiosyncratic, it is almost certainly less expensive to iron out these problems in a functioning system than to mount a major new survey large enough to achieve precision at the local level.

THE IMPLICATIONS OF CHANGING FAMILY PATTERNS AND BEHAVIOR FOR LABOR FORCE AND ECONOMIC HARDSHIP MEASUREMENT

As the title indicates, our purpose in this paper is to discuss the impact of changing family patterns on labor force behavior. This, in turn, has major implications for the interpretation of any measure of unemployment as a measure of economic hardship. Our thesis is that it is no longer tenable to use (even for press release purposes, let alone for the allocation of federal funds) a measure of available or unused labor resources as a measure of economic hardship or deprivation. The former is related to the characteristics of an individual, the latter to the income pooling unit (family or household)[1/] the individual belongs to. This has always been a valid conceptual distinction. Why, then, did we ever assume that the same measure (the unemployment rate however defined) could be used as an indicator of both?

The basic conventions and procedures currently used in collecting employment and unemployment statistics--and in summarizing them for use by policy makers, scholars, and headline readers--were, except for relatively minor changes, developed more than 35 years ago. They were formulated on the presumption that the predominant mode of living was a simple nuclear family with a clearly and traditionally recognizable "breadwinner," and that most of the unemployed counted in the surveys and chronicled in the newspapers were responsible for the livelihood of nonworking wives, children, and perhaps other dependents. Even if that view was always

somewhat fictional, the proportion of the labor force made up of women and youths was stable enough to make feasible the maintenance of that fiction. Any increments or decrements in unemployment could thus be regarded as reflecting major trends affecting the breadwinners--who made up the labor force, and whose earnings also constituted the income of their families.

With respect to policies designed to alleviate economic hardship, there was general acceptance of the view that the breadwinner and his job were the cardinal objectives of public concern. Analysts looking at the issue from the resource utilization side could get away with focusing most of their attention on the stereotypical industrial worker (able-bodied, full-time, prime-aged, and male). And this focus was indeed more permissible then than now, because of the rapid growth of the service industries relative to manufacturing that has taken place since the 1950s.

With more women coming into the labor market and young persons making up a larger portion of the active labor force, observers have no longer been content to stick with the conventional interpretation of the overall unemployment rate. We are increasingly being given rationalizations for "high" rates based on compositional changes that weight more heavily the experience of "nonbreadwinners"--that is, people who are not the major earners in multi-person families. The emphasis is sometimes placed on the irreducibility of the higher unemployment experience of these groups, and sometimes on the notion that as "secondary" earners or as individuals without dependents their unemployment experience does not "matter" as much, in either a resource-wasting or hardship sense.

Whether or not the irreducibility or the relative triviality arguments can be sustained is not the issue here. The point is that we are looking at and trying to interpret statistics that are not well tuned (if they ever were) to analytically or politically useful categories. The concept of the sole breadwinner has become anachronistic. This has major implications for data collection, aggregation, and presentation.

1. Major Trends in Family Patterns and Behavior

Four major trends in household and family patterns and behavior are of particular importance in any discussion of labor supply behavior. The first is the increasing labor force participation of women. This increase is most marked for married women including mothers of small children. The second trend, the inevitable result of the first, is the increasing incidence of two- or multiple-earner families, with its implications for widening the absolute divergence between high-earning and low-earning households. The third trend is the product of the increasingly common pattern of divorce and remarriage--leading to substantial volatility in the composition of households over time. The fourth is the fading of the stereotypical behaviors associated with different stages in the life cycle due, at least in part, to longer life spans and an increasingly wealthy society.

Increasing Labor Force Participation of Women

The trend that is always mentioned first in any discussion of current labor force trends is the steadily increasing labor force participation of women--and, in particular, married women.

Table 1 shows the relative labor force participation of men and women in 1955, 1964, and 1976. These three years are chosen for this and subsequent tables showing trends because they each come at the same period of the business cycle (the first year of the upturn) and they roughly reflect decade-to-decade changes. (All statistics shown, unless otherwise noted, are from the March Current Population Survey for the appropriate year.) As can be seen, the male civilian labor force grew from 44.5 million in 1955 to nearly 56.4 million in 1976, while the female civilian labor force grew from 20.5 million to 38.4 million. Whereas in 1955 only 31.6% of the civilian labor force were women, in 1976 women accounted for 40.6% of the nation's nonmilitary working force.

Table 1 also shows the labor force participation rates of men and women according to their marital status. Participation rates for divorced, widowed, and separated persons stayed relatively constant between 1955 and 1976 for both men and women. Participation rates for single workers increased about 5 1/2 percentage points for men and 12 1/2 percentage points for women. For married persons the figures are startling. Participation rates for wives rose from 27.7% to 45.0% between 1955 and 1976--an increase of 17.3 percentage points, or almost two-thirds. Rates for husbands, in contrast, decreased from 90.7% to 82.4%.

Table 2 shows labor force participation rates for adult women between 1955 and 1976, disaggregated by age as well as by marital status. The participation rates for single women decreased except for the youngest age groups shown (those in the age bracket 25-34 years), for whom labor force participation increased modestly. For the divorced, widowed, or

TABLE 1

PARTICIPATION IN THE CIVILIAN LABOR FORCE,
BY SEX AND MARITAL STATUS,
1955, 1964, 1976

	1955		1964		1976	
	(thous)	(%)	(thous)	(%)	(thous)	(%)
Total	65,023	59.3	73,091	58.7	94,773	61.6
Men	44,475	85.3	47,679	81.0	56,359	77.5
Women	20,548	35.7	25,412	38.7	38,414	47.3
Single						
Men	8,276	61.2	8,617	50.8	12,552	66.7
Women	5,087	46.4	5,781	40.9	9,083	58.9
Married, Spouse Present						
Men	34,064	90.7	36,898	87.8	39,444	82.4
Women	10,423	27.7	14,461	34.4	21,554	45.0
Divorced, Widowed, Separated						
Men	2,976	60.7	2,933	56.3	4,164	63.3
Women	4,643	39.6	5,157	38.7	7,181	40.9

Source: U.S. Department of Labor and U.S. Department of Health, Education, and Welfare, Employment and Training Report of the President (Washington, DC: U.S. Government Printing Office, 1977), Tables A-1, A-4, B-1.

separated, participation increased somewhat for all three age groups. For those with husbands, the startling increase noted above is reflected in the behavior of each age group, but is most marked for those aged 25-34 years. Their labor force participation rate almost doubled until, by 1976, half the married women aged 25-34 were in the labor market.

TABLE 2

LABOR FORCE PARTICIPATION RATES OF WOMEN, BY MARITAL STATUS AND AGE

	1955	1964	1976
Single			
25-34 years	80.9	87.2	84.5
35-44	81.2	83.0	76.4
45-64	74.8	71.3	70.8
Married, Spouse Present			
25-34 years	26.0	30.6	49.8
35-44	33.7	39.4	54.3
45-64	29.0	39.5	44.3
Divorced, Widowed, Separated			
35-34 years	60.5	60.3	72.0
35-44	64.6	63.7	71.2
45-64	53.3	60.4	58.2

Source: Employment and Training Report of the President, 1977, Table B-2.

What about these married women? Is their increased participation due to fewer women having children? Table 3 tells the story. The increase is not restricted to, and in fact is not most pronounced for, those with no children under 18 years old. The most conspicuous increase is for those with children under six, increasing from 22.7% in 1955 to 36.6% in 1976. The 1976 participation rate for those with only children under six was greater than for those who also had older children--probably reflecting the fact that these are younger women and thus the most affected by changing earning opportunities and social mores.

TABLE 3

PARTICIPATION IN LABOR FORCE OF WIVES, HUSBAND PRESENT, BY PRESENCE AND AGE OF CHILDREN

	1955		1964		1976	
	(thous)	(%)	(thous)	(%)	(thous)	(%)
No children under 18 years	5,227	32.7	6,545	37.8	9,860	43.8
Children 6-17 years only	3,183	34.7	4,866	43.0	7,270	53.7
Children under 6 years	2,012	16.2	3,050	22.7	4,437[a]	36.6[a]
Children under 6 years only	927	15.1	1,408	23.6	2,503[a]	38.7[a]

[a]1975 figures.

Source: Employment and Training Report of the President, 1977, Table B-4.

Multiple Earner Families

The statistics in Tables 1-3 lead one to expect to find steadily increasing proportions of multiearner households, including increased proportions of husbands who are not the sole support of their wives and children. Table 4 attests to the validity of this expectation. Of husbands in the labor force in 1955, nearly one-quarter had wives in the labor force and 40% had one or more household members working or looking for work. By 1976, 40% had wives in the labor force and nearly 60% had one or more household members who belonged to the labor force. The steadily increasing numbers of household members in the labor force, it should be remembered, have been accompanied by decreasing average household size.

If we look at husbands who have jobs, we see the incidence of multiple earner households. Already in 1955, 40% of the husbands who were

TABLE 4

EMPLOYMENT STATUS OF HUSBANDS, BY EMPLOYMENT STATUS OF OTHER HOUSEHOLD MEMBERS, 1955, 1964, 1976

	1955 (%)	1964 (%)	1976 (%)
Husband in labor force	100	100	100
Household member(s) in labor force	39.9	47.6	58.9
(Wife only in labor force)	(23.9)	(28.8)	(39.3)
Household member(s) employed	38.2	44.3	54.8
Husband employed	100	100	100
Household member(s) in labor force	39.6	47.3	58.9
(Wife only in labor force)	(23.6)	(28.6)	(39.1)
Household member(s) employed	38.0	44.3	55.0
Husband unemployed	100	100	100
Household member(s) in labor force	48.8	54.4	60.6
(Wife only in labor force)	(31.3)	(36.6)	(44.6)
Household member(s) employed	42.4	44.4	50.8

Source: Employment and Training Report of the President, 1977, Table B-3.

Note: Where we have used "household" the Census uses "family."

employed had at least one household member in the labor force, and almost as many (38%) had at least one household member working. In 1976, almost 60% of employed husbands had a household member(s) working or looking for work and 55% had at least one actually holding a job.

Other earners in the household have also provided increasing insulation against the consequences of job loss by the husband. In 1955, 42.4% of unemployed husbands had household members who did have jobs. By 1976, more than half the unemployed husbands had household members who were employed. Table 5 shows employed and unemployed persons in primary families, and highlights an interesting contrast. Of the husbands who were employed in the first quarter of 1977 (this includes the very small number of men who headed primary families and did not have wives), over 56% had at least one family member who also had a job. Of the employed women who headed primary families, in contrast, only 31% had someone else in the family also with a job. The unemployment figures show an even more sobering contrast. Of the unemployed men who headed primary families in the first quarter of 1977, nearly half had someone in their family with a job. Of the unemployed women heading families, only 18% had a family member with a job.

Table 6 enables us to assess the consequences of these trends within the context of all American multiperson households. In March 1976 there were 56.2 million of these in the U.S. Of these, 84% were husband-wife families, just over 13% headed by women, and somewhat under 3% headed by men without wives. The predominant pattern is clearly still the husband-wife unit. Only 21%, however, contain four persons (meaning that only 18% are of the husband-wife-two-children variety).

In 30% of these husband-wife units the husband was the only earner in 1975, in 42% there were two earners, and in 15% there were three earners or more. In nearly 10% of them the wife had the largest earnings in 1975. Putting the whole picture together--including the units headed by women and

TABLE 5

EMPLOYED AND UNEMPLOYED PERSONS BY PRIMARY FAMILY RELATIONSHIP AND PRESENCE OF WORKING RELATIVES, FIRST QUARTER 1977

	Total (thous)	With no other employed household member (%)	With at least one other employed household member (%)
Employed, total	87,434	39.3	60.7
Employed, in families[a]	76,220	30.4	69.6
Husbands[b]	38.234	43.8	56.2
Wives	20,515	10.4	89.6
Relatives in h-w families	10,761	7.2	92.8
Women who head families	3,862	68.7	31.3
Relatives of women who head families	2,848	29.2	70.8
Employed, not in families[c]	11,214		
Unemployed, total	7,838	41.8	58.2
Unemployed, in families[a]	6,729	32.2	67.8
Husbands[b]	1,975	51.6	48.4
Wives	1,520	17.5	82.5
Relatives in h-w families	2,044	12.9	87.1
Women who head families	418	81.8	18.2
Relatives of women who head families	772	35.5	64.5
Unemployed, not in families[c]	1,109		

[a]In primary families only.

[b]Includes a small number of men who are separated, widowed, divorced, or never married and head families.

[c]Includes unrelated individuals and a small number of persons in secondary families.

Source: Janet L. Norwood, "New Approaches to Statistics on the Family," Monthly Labor Review (July 1977), p. 33.

TABLE 6

MULTIPERSON HOUSEHOLDS IN THE UNITED STATES, MARCH 1976

Characteristics	Total (thous)
All	56,245
Husband-wife	47,308
Other	7,452
Headed by women	1,485
Headed by men	
Husband-wife	47,308
Size	
2 persons	17,027
3 persons	9,858
4 persons	10,122
5 persons or more	10,301
Number of earners (1975)	
None	4,684
1 earner Total	15,664
Husband	13,962
Wife	1,246
2 earners: Total	19,749
Husband and wife	16,683
3 earners or more: Total	7,211
Husband and wife	5,652
Member with largest earnings (1975)	
Husband	36,744
Worked year round, full time	28,178
Wife	4,468
Worked year round, full time	2,801
Other relative	1,402
Worked year round, full time	854

Source: Norwood, p. 32.

Note: Where we have used "multiperson household" the Census uses "family."

those with no earnings--we find that the principal economic support of almost 30% of all American multiperson households does not come from the earnings of the male head.

Volatile Family Composition

As we saw in Table 6, the husband-wife combination is still very much the predominant form of household. It does not mean, however, that the same husbands remain married to the same wives, that children remain attached to the same husband-wife combination, or that only a small minority of people ever belong to a single-parent household. All this is far from being the case in the United States today.

The incidence of divorce is high and increasing with each birth cohort. The lifetime divorce rate for current 35-year-olds, for instance, is now predicted to be between 30% and 40%.[2/] The remarriage rate is also increasing. In 1970, it was 31.7% for women aged 55-64 years, 45.2% for women aged 50-54, and 52.5% (over half) for women aged 45-49. The average duration between first and second marriages (very few women marry more than twice) is about five years. Thus, although only about 16% of American multiperson households in 1976 were not husband-wife families, a much higher proportion of the nation's children, in consequence, also go through the experience of living with a single parent.[3/] Mary Jo Bane has estimated that as many as 46% of American children may experience marital breakup at some point during their upbringing.[4/]

Another important factor in household membership volatility is the rapidly increasing incidence of one-person households--for most people, again, a transitory status. Households, as we have mentioned, have been

getting smaller for a long time, and have now fallen below three persons per unit. A substantial part of the change in the past has been due to fewer children in the home and, in the more distant past, to the virtual elimination of servants, apprentices, etc. In recent years there has actually been a rapid increase in one-person households--a 40% increase from 1970 to 1976, as compared to only an 11% increase for multiperson households. Solitary male households grew by nearly 57% over the same period, while other male-headed households increased by only 8%. Solitary females increased their numbers as much as the already-noted female household heads (both increased by nearly one-third). By contrast, the population of all adult household heads increased by only 12% during the six year period. Much of the disproportionate increase is accounted for by those under 35 and with at least a high-school diploma. Both the permanence and meaning of this important shift are proper subjects for study, but the phenomenon itself is sufficient to raise questions about family dependency patterns that may persist across separate households. When one-person households were a fairly small stable fraction, and concentrated among the older population, it posed a minor problem for interpreting unemployment data; when it is increasing rapidly among the young, it cannot be ignored.

These trends exacerbate the lack of correspondence between the economic hardship of households and the employment or earnings status of individuals. The increasing proportion of wives going into the labor force produces more multiearner households. Even when account is taken of the added costs of a second earner (child care, possibly a second car, additional clothing), such households, according to measured money income, are on

average distinctly better off than single-earner households of the same size and composition, and far and away more affluent than the vast majority of single-earner single-adult households. To the extent that assortative mating pairs persons with similar earnings potential, absolute income inequality among households is further increased. At the same time, the increasing incidence of divorce means that a larger proportion of our population experiences at some point the peculiar economic vulnerability of the single-adult household with children.

Labor supply measures cannot be designed effectively to take these factors into account and still retain any validity as labor market indicators. By the same token, neither job programs nor wage legislation are appropriate tools for the economic hardship associated with various household circumstances.

Growing Variation in Behavior at Various Life-Cycle Stages

Another stereotype that has simplified the measurement and analysis of the labor force is the traditional life-cycle progression--first completing one's education, second entering the labor force and working throughout the prime years, and third retiring (enjoying "leisure") when old. There is evidence, much of it admittedly anecdotal and somewhat soft, that this lock-step pattern may be breaking down, at least at the margins. A small survey of life cycle preferences among workers (not clearly the same thing as actual behavior) showed, for example, that more than three-quarters of them, in terms of both personal preference and their judgments of overall societal well-being, rejected the strictly traditional life-cycle pattern.[5/]

More and better longitudinal data are necessary before we can say anything definitive about what changes are actually occurring in people's

responses to the diffent "passages" of life. The evidence we do have, however, combines with the trends already documented of increasing labor force participation on the part of women to suggest that the traditional orderly progression is giving way to more flexible patterns.

Let us first discuss the education and labor force activity of youth (which we shall define as those aged 14 to 24 years because that is the breakdown used in the 1977 Employment and Training Report of the President from which we are drawing our basic statistics).

Table 7 shows the increasing relative numbers of youth in the population and in the labor force. Youth made up 16 1/2% of the civilian labor force over 14 in 1955, 19% in 1964, and a full 25% in 1975.[6/] The labor force participation rate of youth rose from 49% to 54% over the whole 1955-1975 period, and between 1964 and 1975 it rose almost 10 percentage points. Some speculation of the meaning of this trend is in order.

The process of entry into the labor force has always been treated as indistinguishable from the process of leaving the student body and, indeed, in the past the shift from schooling to work was a once-for-all transition for the vast majority of people. Anecdotal evidence suggests that current reality is more complicated, and that there may increasingly be a groping around in-and-out process for many of today's youth before they choose a long-term job path.

The aggregate data certainly show an increasing tendency for youth to mix labor force participation with school enrollment. Table 8 shows for 1955, 1964, and 1975 the school enrollment of youths by age grouping and sex. The proportion enrolled in school increased for each age category for both

TABLE 7

LABOR FORCE STATUS OF CIVILIAN YOUTHS 14 TO 24 YEARS

	1955	1964	1975
14 years and over			
Population (thous)	117,441	134,152	161,902
In labor force (thous)	65,892	74,119	94,003
Labor force participation rate (%)	56.1	55.3	58.1
Youth 14-24 years			
Population (thous)	22,192	31,421	43,153
As % of population over 14	18.9	23.4	26.7
In labor force (thous)	10,861	14,207	23,232
As % of labor force over 14	16.5	19.2	24.7
Labor force participation rate (%)	48.9	45.2	53.8

Source: Calculated from the Employment and Training Report of the President, 1977, Tables A-1 and B-6.

sexes. This may not be considered surprising, since we know the overall educational level of the population is rising for each successive generation. Table 9 shows, for the same years, labor force participation rates by age grouping, sex, and enrollment status. Let us look first at the patterns for those enrolled in school. The trend in participation rates was generally stable or downward between 1955 and 1964. Between 1964 and 1975, in contrast, the participation rates of those enrolled increased substantially for both sexes and every age group.[7/]

TABLE 8

SCHOOL ENROLLMENT OF CIVILIAN YOUTHS, BY AGE AND SEX

	1955	1964	1975
14-17			
Population (thous)			
Male	4,622	7,055	8,501
Female	4,547	6,923	8,265
% enrolled			
Male	88.6	94.4	94.6
Female	85.2	91.8	92.6
18-19			
Population (thous)			
Male	1,770	2,434	3,891
Female	2,135	2,842	4,133
% enrolled			
Male	42.5	50.1	50.0
Female	22.5	33.7	44.2
20-24			
Population (thous)			
Male	3,797	5,596	8,833
Female	5,321	6,571	9,530
% enrolled			
Male	18.1	23.8	26.4
Female	6.1	10.9	18.7

Source: Employment and Training Report of the President, 1977, Table B-6.

These data are consistent with the interpretation that the rising enrollment rates mean that people from less well off families are going to college and are having to work in order to finance their higher education.

TABLE 9

LABOR FORCE PARTICIPATION RATES OF CIVILIAN YOUTHS, BY SCHOOL ENROLLMENT, AGE, AND SEX

	1955 (%)	1964 (%)	1975 (%)
Enrolled in school			
14-17			
Male	28.9	24.7	29.1
Female	16.4	16.8	26.2
18-19			
Male	43.9	36.0	42.0
Female	28.1	25.2	41.1
20-24			
Male	41.7	48.0	51.2
Female	42.0	37.8	55.1
Not enrolled			
14-17			
Male	81.4	68.8	67.8
Female	44.4	41.1	43.1
18-19			
Male	94.8	92.0	91.2
Female	61.9	60.2	66.9
20-24			
Male	96.7	96.6	93.5
Female	48.6	51.8	66.6

Source: Employment and Training Report of the President, 1977, Table B-6.

(Certainly, the advent of the work-study programs will have contributed to increasing the number of enrolled students who work.) The data are also, however, consistent with the hypothesis that many of the young are in no

hurry to finish the education and training phase of their lives. There is evidence that the young are quite sensitive to market signals about how much and what kind of schooling pays off,[8/] but young workers may well have a different idea of what "paying off" means from their elders. Without dependents and with their youth, a job with current earnings adequate for their current wants (a car, skiing on weekends) may be fine. Paying off in the lifetime career sense may be a measure that many workers become interested in at a somewhat later stage.

This should not be taken to mean, however, that those under 25, as a group, have a weaker commitment to the labor market than older workers. Labor force participation rates for youths not enrolled in school are moving in a similar way to those of the working age population as a whole (see Table 8). Except for the 14-to-17 year olds (who form a small and odd group that are not of great interest here), we see a slight downward trend for men, due in part surely to the discouraged worker phenomenon resulting from high prevailing unemployment rates for youth and to a decline in marriage rates for young people, but in part possibly also--since the trend is in the same direction as that for men in general--to the more flexible work patterns expected of men by society. The female labor force participation rates--again like the rates for women in general--show a rising trend, particularly since 1964. These movements are consistent with there being a substantial proportion of youth whose labor market behavior is not different in kind from that of their elders. Our point is that, with respect to labor market behavior, youths (as other groups) should not be regarded as homogeneous.

The second major stage of the life cycle that deserves attention in any discussion of the labor force effects of family trends and behavior is the midlife stage. As we have already noted, increasing numbers of women of all ages are entering the labor force. Other factors, in our view, are beginning to combine with this trend in such a way that we can expect increasing numbers of both men and women to make distinct shifts in their working patterns during their prime age adulthood.

First, expanding job opportunities for women, and the new recognition that both earners should have equal opportunity (if not at the same time, at least one after another) can be expected to result in an increasing proportion of the labor force of both sexes making major employment shifts to accommodate the career needs of their spouses. Second, there is increasing evidence that people in their middle years (particularly now that life expectancies are so high) want or need a major career shift for psychological reasons. If, in economic parlance, a variety of job experiences during one's working life is a normal good, the increasing incidence of two-earner, two-income families will enable more people to indulge this preference. The expansion of adult education is certainly at least in part a consequence of this trend, and can be expected to strengthen it.

The final stage in life is old age. The traditional response to old age, of course, is complete retirement. As with the traditional responses to earlier life-cycle stages, responses to this stage may be starting to vary. Longer life expectancies, increasing recognition of the rights of the elderly, and the consequences of the dropping birthrate on the age distribution can all be expected to stimulate such a trend. We do not

expect the work effort of the elderly to expand dramatically, but it is clear that declining birthrates and financial troubles of the Social Security System will stimulate taxpayers in the younger cohorts to consider changing the work incentive structure facing the elderly in the direction of encouraging work. As the elderly include more and more dual earner families, policy questions concerning program benefit eligibility for spouses who differ in age and/or health are also inevitable. Such developments could well lead to an increase in the supply of part-time and/or part-year workers who are experienced and have reliable work habits--unlike the traditional concept of the occasional worker.

2. Measures of Hardship and Deprivation

How hardship is to be measured depends, of course, on the definition we give to it. This section discusses different types of hardship and examines deficiencies in our measures of hardship variously defined.

Chronic Versus Acute Hardship

The term "hardship" is normally understood to mean economic hardship --falling on hard times. Economic hardship can be chronic and persistent, or acute and temporary.

Chronic hardship is what most people have in mind when they think of poverty--long-term suffering from low income. The state of poverty, it would generally be agreed, is characterized by access to too few resources to enable those dependent on the resources to participate adequately in society or to develop their human capital to its full potential. Clearly, a temporary spell of unemployment taken by itself does not induce such

poverty. Unemployment may contribute to chronic hardship if prolonged and frequent, but it is not the only or even the major influence.

Table 10 shows the relationship to the labor market of multiperson households below the official poverty line in 1975. (The official measure of poverty has serious deficiencies which we discuss below, but it is adequate for our purposes of this stage of the argument.) It shows that many poor households are out of reach of labor market conditions good or bad. It also shows that many have members whose work effort in the market is substantial but who cannot command sufficient earnings to take them and their dependents over the poverty line. On the one hand, over 50% of poor multiperson households in 1975 were headed by someone not in the civilian labor force and 40% contained no earners. On the other hand, about 20% of the heads of those households worked all year round (most of them full time) and 21% contained more than one earner. The involvement in the labor market of those counted as poor by the official definition has been declining over the last decade. This is partly due to the increasing incidence of separate household formation by relatives who used to be counted as dependents. It is also partly due to a decline in real terms in the income level officially designated as the poverty cutoff.

Acute hardship is produced by an unexpected, major, and sudden interruption in an income source. It is independent of both absolute income levels and the source of the income loss as long as it is a significant share of the total. Acute hardship can certainly be induced in a high income household if it has undertaken fixed dollar obligations accounting for most of its income stream and has exhausted its readily available credit lines. Such

TABLE 10

LABOR FORCE CHARACTERISTICS OF POOR MULTIPERSON HOUSEHOLDS, 1975

	Thousands	Percent
Total	5,450	100
Number of earners		
0	2,174	39.9
1	2,069	38.0
2	883	16.2
3 or more	295	5.4
Employment status of head		
Employed	2,154	39.5
Unemployed	505	
Not in the civilian labor force	2,791	51.2[a]
Work experience of head		
Worked	2,745	50.4[a]
50-52 weeks	1,070	19.6
(full time)	(860)	(15.8)
27-49 weeks	591	10.8
1-26 weeks	1,084	19.9
Did not work	2,675	49.1
In armed forces	30	0.6

[a]The apparent inconsistency is because not in the labor force is a survey week measure, working is measured on an annual basis.

Source: U.S. Department of Commerce, Bureau of the Census, Characteristics of the Population Below the Poverty Level: 1975, Current Population Reports Series P-60, No. 106, June 1977.

a household may possess durable goods and assets, but the wealth is not very liquid and the hardship caused by even a 20% to 30% reduction in current income is significant. Moreover, acute hardship may have ripple effects on

other households dependent upon either legally binding or voluntary inter-household transfers--elderly parents, for example, or children away from home.

Sudden earned income loss is one cause of acute hardship. The extent of the hardship thus suffered, however, depends not only on what proportion of total income those lost earnings constituted but on many other variables as well. Foremost among these is the degree to which the household is protected by compulsory or voluntary insurance against the risk of such interruption. Public unemployment and disability insurance benefits are clearly a response to a need felt in some degree by earners at all income levels. Indeed, the existence of private income loss insurance attests to some unsatisfied demand on the part of higher income earners. Other factors that affect vulnerability to sudden earnings loss include the flexibility of a household's expenditure commitments, the possibility of borrowing or dissaving, and the possibility of private transfers from an extended family network outside the household suffering the immediate impact.

There are currently no estimates of the incidence of acute hardship or relative vulnerability to it. The development of such measures is an important long-range research item. Better estimates of its incidence and of relative vulnerability to it are necessary, however, if any substantial improvements in our social insurance system are to be made--in terms of what kind of catastrophes society should insure its members against and over what period benefits from social insurance programs should be paid. In particular, the conceptual issue of when acute hardship becomes chronic needs careful examination. Longer and longer benefit payment periods in the unemployment insurance system is, in our view, a program development that is due to a

confusion between the two. Estimates of relative vulnerability to acute hardship are important for program and budgetary planning.

Such measurement is, admittedly, a difficult problem because it requires detailed knowledge of individual balance sheets, eligibility for public or private insurance, and the availability of funds, if needed, from extended family members. Its political importance, nonetheless--at least that part of it that stems from earnings loss--is well testified to by the wide public support for unemployment insurance programs. The current poverty measure, since it is a measure of income over a single year, catches some of it, but we should have a better idea of how much. It has been estimated, for instance, that 31% of those counted as poor in 1972, using the official annual definition, would have been considered nonpoor if a five-year definition had been used. (Complications go the other way too; 17% of those poor under the five-year definition would have been counted as nonpoor in 1972.[9/])

The appropriate definition of unemployment, in our view, is an offer to work at going wage rates which is not met by an offer to employ. In this sense, unemployment can contribute to (although it is by no means the only cause of) economic hardship whether chronic or acute. It should be noted here that unemployment so defined can cause psychological hardship as well. To the extent that persons gain a substantial part of their self-image and self-respect from their work, not having their offer to work accepted by the market--whether for macroeconomic reasons or because of discimination--is damaging. The more frequent and persistent the unemployment the more damaging. It can induce the sense of helplessness that leads

to withdrawal from active job seeking. It can also spill over to the next generation of potential workers. If, as children, they develop their expectations and aspirations from involuntarily unemployed parents, they are in danger of drawing the same conclusions about their own future chances of prospering in the labor market. The extent of unemployment as currently measured is the appropriate gauge of this kind of hardship. And we should emphasize that it is not alleviated by policies designed to provide earnings replacement.

The Measurement of Chronic Economic Hardship

The usual measure of chronic economic hardship is the official poverty count. This is a current income measure with an absolute income cutoff adjusted for household size, above which persons or households are counted as nonpoor. The concept of an absolute income poverty cutoff is admittedly and inherently arbitrary. The level at which it is set should certainly bear some relation to the average or typical standard of living in a society, and should thus be increased in real terms when overall living standards rise. Perhaps it could also be softened by recognizing "layers" of poverty, much as is already done by tabulations not only of people below the poverty line, but below 125% and 150% of poverty as well. There are major deficiencies in the comprehensiveness of the income that is included, however, which are much more serious than any arbitrariness in the concept and are in urgent need of rectification.

What is needed is a comprehensive measure of "resources commanded" and details about their sources. No national measure for which the data collection task is financially or administratively feasible is going to be

perfect, but the current measure is deficient in four major and indefensible ways. It excludes all in-kind benefits (public and private), includes only a fraction of private transfers among households, takes no account of taxes paid, and ignores the major costs of working for a parent who is responsible for the care of dependent children.

First, in-kind benefits. The importance of in-kind benefits in the public transfer system has increased steadily and dramatically since the official definition of poverty was developed in the early 1960s. Their omission from the definition of income was perhaps defensible then because there were few such programs and those that existed were small. Since then, however, Medicaid, Medicare, Food Stamps, and housing subsidies have all become major programs. The outlays for the Food Stamp program in fiscal 1975, for instance, was $4.6 billion; Medicaid and Medicare now cost annually more than $25 billion.[10/] In 1972, inclusion of public in-kind transfers in the income measure had the effect of halving the number of households in poverty.[11/] Their relative importance has continued to increase. The extent of private in-kind benefits is also substantial. The employer-provided portion of private health insurance, for instance, is estimated at $20 billion a year.[12/] To exclude such benefits clearly biases aggregate incomes downward. It also distorts income comparisons across time and across households.

Inclusion of the cash equivalent of private and public in-kind benefits in the official measure of income is, therefore, an important change that should be instituted. It is particularly important to emphasize that the inclusion of public in-kind transfers should not be done without also

including the considerable job-related and other in-kind benefits enjoyed by the upper income groups.

Second, interhousehold transfers. The recent sharp increases in one-person households along with the steadily increasing incidence of one-parent households have resulted largely from the undoubling of households which used, out of economic necessity, to live under the same roof. Secular increases in income, plus the increasingly generous public transfer programs, have made this undoubling possible. A substantial proportion of these households used to be counted as dependent members of other household units. It was, therefore, less important to count resources received by relatives because they are intrahousehold transfers. Undoubling is now causing them to be counted as separate units. The resources they receive from relatives, however, are not counted in their income, thus artificially inflating the incidence of chronic hardship and, in particular, distorting comparisons of household income over time. This is because the increasing incidence of undoubling will increase the extent to which private transfers among relatives become <u>inter</u>household transfers and must, since those who receive them are counted as separate units, be counted as income received by those units.

The income statistics we now collect do ask for regularly required money transfers such as alimony and child support, but they are generally admitted to be seriously undercounted. It is simply not known how much interhousehold transfer is involved when separate living arrangements are established for young adults or retained for the elderly. Nor are irregular interhousehold transfers (that is, those that respond to changes in current

need) recorded at all, except those that slip in under the heading "gifts," another category acknowledged to be underreported to a substantial degree.

Third, the personal income tax. The effects of the tax system should also be reflected in income measures. Their omission again distorts comparisons across households. In particular, the considerable tax shelters and loopholes in the personal income tax system are available only to households well-off enough to be able to take advantage of them. Deduction of mortgage interest and taxes on owner-occupied homes, for instance, is estimated at $10 billion a year.[13/] Deductions for day care, business expenses, and health expenditures all yield substantial economic benefits to the upper income groups.

Fourth, adjustment for the working adult responsible for the care of children. A two-parent household in which one parent works and the other stays at home to take care of the children is better off, most people would agree, than a two-parent household with the same money income in which both parents work, or a one-parent household with the same money income in which that parent works. The first household has a major child care resource which is not reflected in the statistics and which the other two families do not have. The requisite research has not yet been done for us to be able to make any responsible recommendation on what the magnitude of this adjustment should be. It is a complicated conceptual issue that must be solved before numerical estimates can be developed.[14/]

It is important to differentiate data collected for purposes of assessing the economy as a whole from data necessary to assess program eligibility or to implement allocation formulae. The former include data

collected on a large nationwide sample basis, such as the Current Population Survey, and detailed longitudinal data on smaller samples. In addition to summary numbers assessing the overall performance of the economy, they provide the basis for a variety of analytic studies aimed at understanding the behavioral and environmental processes that cause hardship, and make possible the development of complex social indicators that are sensitive to the consequences of policy change. The latter require larger samples in order to achieve adequate precision for geographic subdivisions, but can be less comprehensive and detailed if there are prior specifications of the criteria from which eligibility can be inferred and allocation formulae evaluated.

Whatever the type of data, there is no inherent reason why the needed improvements in hardship measures should be combined with changes in the way we collect and display labor force data. The need for better measures of our active, idle, and potential labor resources is also urgent, but they are aimed at answering essentially different questions. To these we now turn.

3. Social Waste and Opportunity Cost

This section of the paper is concerned with the product side of the economy. The gross cost of an unemployed person from this perspective is the foregone value of the output that that person could have produced.[15/] Labor market activity, however, is only one component of socially productive time use. There are many nonmarket uses of time that produce goods and services within the family or household, often indistinguishable from goods and services available for purchase in the market. We get a distorted

picture of the cost incurred when someone is not employed in the labor market unless we have information on what would be lost in the way of non-market productive activities if that person were to be employed. We also need an appropriate method of assessing the relative value of the work contributed in the labor market by different workers.

Comprehensive Measures of Time Use

From the social product perspective, full employment means the maximum exploitation of the nation's labor resources. Productive time use, however, is not restricted to activity in the labor market. The appropriate assessment of the loss to society from the unemployment of a potential worker, therefore, is the lost value of the output the labor market employment of that resource would have made possible minus the social cost that would be incurred by any displaced nonmarket productive activity. A comprehensive accounting of productive time use is essential before such an assessment can be made.

What economists call "nonleisure" time use can be divided into five conceptual categories: (a) labor market activity, (b) productive work in the home, (c) child rearing, (d) schooling and other training, and (e) job search.

We would argue that all these categories of time use with the possible exception of part of category (e) are productive activities. There is no argument about category (a). Labor market activity is the traditional concept of productive work. It is also not new to recognize category (b)--work in the home including the kind of child care whose purpose is to preserve the physical health and safety of the children--as productive time use. Our point is that it is not recognized in labor supply or output statistics and

is therefore frequently ignored in analyses of the benefits to be gained from moving more people into the paid labor force. We are not arguing that home production be imputed a value and added to estimates of our national product. But we are arguing that time spent in these activities must be carefully measured if we are to get an undistorted picture of the extent of our unused or underused labor resources. Child rearing plus formal schooling and other training--categories (c) and (d)--should, in our view, be counted as productive uses of time because they have as their outputs the development of human capital. There is a quality dimension as well as a quantity dimension to the labor force, which is well summed up in the concept of human capital. The kinds of labor available are at least as important, according to growth experts, as the numbers. Child rearing is here defined as activity whose prime purpose is to communicate with children, enrich their experience, and contribute to their learning. Analysis of how human capital is developed is only just beginning, but it is already clear that it needs substantial inputs of time. Child rearing behavior is obviously important in this respect because it affects the quality (and possibly the quantity) of the labor force of the future. Formal schooling and other training, similarly, are undertaken because of their potential yield of important human capital additions. Job search--category (e)--is the most problematic. We would argue that at least part of it is indirectly productive, since the process of effective labor market adjustment requires the search for and sifting of job opportunities (frictional unemployment). In any case, careful measurement of time spent in job search is essential because changes in it are good indicators of changes in relative labor market disequilibrium.

The Importance of Appropriate Measurement of Labor Market Resources

The quintessential worth of all human beings may indeed be equal. Their value in the labor market, however, is not. The value to the market economy of the loss of a potential worker's effort is equal to the value of the product lost. The current measures of employment and unemployment do not reflect this. Whether a worker is high skilled or low skilled, part-time or full-time, each worker is counted as an equivalent unit in the labor force statistics. Here, again, we get into the issue of labor force quality versus labor force quantity.

The value of a potential worker's product in the labor market depends on the return commanded by the human capital embodied in the worker. The wage rate is the obvious measure of that return. Our view is that the wage rate is also the best measure that we are likely to get. There continue to be lively arguments about how adequate or not the observed wage rate is as a measure of the return to human capital. Alternative estimates have been derived from earnings functions that include variables such as age, education, training, other demographic characteristics. But the loose fits of such functions combined with the innumerable unmeasured variables make them unacceptable as realistic alternaties to the observed wage rate.[16/]. If discrimination exists in the labor market, of course, the wage rate is not a good reflection of the return to human capital. Ideally, the rates should be corrected for this. The ideal is unattainable but, to the extent that defensible estimates of marketwide differentials due to discrimination are available, some correction should be possible by introducing them as adjustment factors. Using the wage rate does have the substantial advantage of being consistent with the conventions used in the National Income Accounts.

Taking, then, the wage rate as the measure of a worker's marginal productivity, it is clear that the unemployment of a high wage worker is a greater loss to society than the unemployment of a low wage worker. It should be emphasized, in this connection, that the chronic economic hardship associated with low wages (sometimes referred to as "less than a living wage") is evidence of underdeveloped human capital rather than an underutilized current labor resource.

Our discussion of changing behavior patterns has made the point that labor force behavior is becoming increasingly varied--across age, sex, marital status, and life cycle stage--and that these varied patterns will become more prevalent in the future. This increasing heterogeneity and change over the life cycle means that labor market behavior can no longer be regarded as homogeneous within demographic groups. Not only should the actual and potential market labor force be measured by the marginal productivities (i.e., wage rates) of its members, but also by the revealed pattern of their labor force attachment. Some workers--young and old, rich and poor, male and female--choose to work in the labor market full time all the time if they can find work. This is revealed by their past labor force habits. Others have a pattern of working part time. Still others enter the labor force for the first time or reenter it after a pause of many years. All these categories, also, are revealed by their past practice. For labor supply behavioral analysis, job market planning, or assessment of under-utilized labor resources, these different categories of workers should be explicitly recognized and the employment and unemployment rates of the various groups separately calibrated. Only then can we do an adequate job

of measuring how far we really are from "full employment," and assessing the most promising policies to move us closer to that goal.

The notion of the potential labor force as a basically stable group--composed of every able-bodied adult, all of whom are supposed to use to the full their productive capacities--is sound. But the current exclusive focus on the paid labor force does not provide the context of nonmarket productive uses of time that is needed for interpretation of movements in paid work activity. It also fails to differentiate among those who are in the paid labor force because of a long-term commitment to paid labor force activity and those whose demand for a paid job is elastic and sporadic. Our Recommendation II below reflects our belief that new types of time use data must be collected before our measures of available labor resources can be improved, and that the paid labor force should be classified according to a different and more refined schema than currently used.

4. Recommendations

There are two major upshots of the evidence and arguments we have presented.

First, the relationship between individual earnings and household income has broken down. Most households now have more than one earner. Many earners have no dependents. About 50% of poor multiperson households have no earners at all. But most of the rest have at least one earner (many of whom work full time all the time) and getting on for a fifth of the total have more than one. In addition, the breaking off of persons who used to be dependents of primary families into households of their own has further

weakened the correspondence. They are counted as separate units but a significant part of their incomes almost certainly comes from interhousehold transfers, which are not counted in their incomes but in the incomes of the unit they used to be part of. Let us finally break the link between unemployment and economic hardship. Let us have measures of labor force status and utilization and measures of economic hardship that each reflect its appropriate objective.

The second upshot of all this is that labor force status and behavior can no longer be inferred from demographic and household status. There are full-time career workers among men, women, mothers, youths, and those over 65. There are also part time and in-and-out workers among all groups. The type of labor force participation to be expected from a worker or potential worker can be more accurately inferred from the past practice of that worker. In addition, the labor market value of that worker to society depends not on the fact that (s)he is offering to contribute productive time but on the value of the time as reflected in the human capital of the worker measured by the wage rate (s)he can command. It also depends on what nonmarket productive time use is lost to the social product by reason of that labor market time.

We have three specific recommendations. Recommendations I and II deal with statistical gathering and compilation for assessing the overall conditions in the economy. Recommendation I contains specifications of needed changes in our measure of chronic economic hardship (i.e., the poverty count). Recommendation II contains our suggestions for a framework within which to collect comprehensive time use statistics plus a schema for the collection

of labor force statistics. Recommendation III contains suggestions for dealing with the problem of small area statistics, particularly small area measures of economic hardship.

Recommendation I: Needed Improvements in Measures of Economic Harship. The concept of an absolute poverty level dependent only on income and household size, below which persons or households are considered to be in chronic hardship, is one that, in our judgment, should be continued. Where the line is to be drawn is inherently arbitrary but, as we have said, that arbitrariness can be softened to some degree by establishing degrees of hardship (measured by income). The way income is defined and counted in current statistics, however, is seriously distorting and improvements in this area deserve the highest priority.

The principal need for improving our measures of hardship is, thus, a data base, collected in a longitudinal survey, that provides a more comprehensive account of the material resources available to households than is now available in the March Supplement to the Current Population Survey (CPS). Debates about absolute versus relative poverty definitions, or about geographical cost of living and other adjustments to establish equivalence across households, are of relatively little moment so long as we are using data that provide an incomplete and distorted picture of the distribution of disposable resources for daily living.[17]

The Michigan Longitudinal Panel Study of Income Dynamics (PSID) has now become the data base of choice for most serious work on poverty-related issues, both because it is relatively comprehensive and because it is longitudinal. The CPS, in contrast, has a much larger sample size--one that can

support studies of more disaggregated groups--but it has not stayed abreast of the new and important changes in the sources of material support available to households.

We believe that the experience gained by the PSID is adequate to guide the design of a major new longitudinal survey of the economic status of American households. We spell out below the major features that must be taken into account in such a survey.

The most urgent improvements needed are expansion in information asked, to bring in-kind benefits (both public and private) and transfers between households (both money and goods) into the measurement scheme. In addition, major improvements are needed in the measurement of some already covered components of money income. The survey should aim at getting a full account of pretransfer net money income, including gross earnings, property income, self-employment income, and with deductions for costs of earning such as transportation, special tools, and care for children during working hours. In the area of transfers and taxes, all public sector programs should be taken into account: social insurance, assistance benefits whether cash or in-kind, and all taxes levied on income or wages.[18/] Two categories of private transfers should also be taken into account: first, employee benefits not paid for by payroll deductions, such as retirement contributions or employer-paid health insurance premiums; and second, cash and in-kind transfers between households. The latter should be recorded at source and at destination, both to avoid double counting of disposable resources and to obtain a basis for validation or for underreporting adjustments.

In addition, the basic details of the household's demographic and family composition must be collected and the survey should secure reports on the employment experience of each adult person in terms that are consistent with the time use and labor force concepts proposed in Recommendation II below.

The survey should be designed to select a sample of households and to follow, for a five-year period, the persons included.[19/] (If a person leaves the initial household, that person and any others in the new household would be also surveyed in subsequent periods. These new "affiliated persons" would not be followed beyond the period of their affiliation.) In full operation, the survey would add a new "class" each year to replace the graduating group (i.e., those who had been in the sample for five years). As a rough approximation--given the precision obtained by the PSID and the CPS--we suggest that each such "class" should consist of 4,000-5,000 households (i.e., a total sample at any time of 20,000-25,000). The sample should be stratified to provide oversampling of households in the lower half of the income distribution. But there should be enough coverage of high income groups to support estimation of distributions covering the entire population. It is proposed that, for each original household, each person (plus their new affiliated household members if they have acquired them) be surveyed annually. It may be desirable to have the survey spread throughout the year both to even out the survey work load and to provide more timely estimates of change in the hardship measures. This approach would provide the basis for a much more confident estimate of the poverty population as presently defined; more important, it would enable improved measures to be developed

based on the more comprehensive definition of income we have recommended. The effectiveness of public programs and private interhousehold transactions for meeting each kind of hardship could be regularly examined. Similarly, the role of various sources of income instability and inadequacy could be studied and continuously monitored.

Such a data base would still not be adequate for good estimation of the incidence of acute hardship. It would, however, give us better estimates than we now have regarding how much of the current poverty incidence is chronic and how much is probably of the acute short-term variety. Acute hardship comes from unanticipated and unprepared-for cuts in income. It is not feasible on a national survey to try and isolate which sudden income cuts answer to this description. Such a survey would, however, be able to identify sudden income drops from a family's prevailing level of well-being. This would at least give us an upper bound estimate.

We acknowledge that the survey we have outlined for strengthening hardship measures is an ambitious one and places heavy strains on the ability of a survey to collect detailed income information. We do not suppose that all underreporting can be overcome in the survey itself. But we do feel it is possible to improve the coverage and accuracy over the current CPS March Supplement so that imputations and underreporting adjustments can be made with less concern about introduction of gross error. Here again, the PSID should serve as a model. A substantial amount of further methodological work would be needed, of course, to approach the problem of employee benefits and interhousehold transfers.

In fact a major new survey, the Survey of Incomes and Program Participation (SIPP), is in the planning and pilot field test stage, which could possibly become the survey we are recommending. According to current plans, however, it will fall short of our objective because of two significant differences. First, SIPP does not provide longitudinal data for as long a period as we feel is needed--five quarters as against five years. Second, it is focused on participation in public programs and on the explicit or implicit transfers provided by those programs, to the relative neglect of interhousehold transfers we feel are so important.

In our view it would be feasible and most desirable to modify the SIPP design to secure the advantages of a longer time perspective and more complete coverage of household resources. (It is also possible that a reduced need for state-level precision on the basis of Recommendation III would permit a smaller sample than is currently projected for SIPP. This issue and related cost savings are discussed in more detail at the end of the paper--after Recommendation III.)

We want to emphasize again the importance of a new data base for guiding and evaluating public policies aimed at relieving hardship. The new information, combined with a basis for assessing the geographical dispersion of hardship (see Recommendation III), would be a powerful addition to the information on which we now base policy formulation and implementation. A survey of this kind would also provide a basis for very sensitive aggregate performance indices and for a large variety of presently impossible behavioral studies.

Recommendation II: A Time Use, Employment, and Unemployment Survey. We urge that a major revision take place in the form and function of our gathering of labor market data from individuals. Severing the link between labor market concepts and hardship would provide the opportunity for data on employment and unemployment to be focused directly on the product (rather than income) aspect of the family or household.

In this regard, there are two principal ways in which our current procedures are deficient. They do not provide the context of nonmarket productive uses of time, which is needed for interpretation of movements in paid work activity. Neither do they provide useful categories for exploring and comparing differences in behavior among adults with respect to the paid labor market. Additionally, the measurement of unemployment as an index of disequilibrium in the labor market could be substantially refined to make it a more reliable indicator of the amount of labor power seeking paid employment changes.

In suggesting more specific details we must emphasize that, although they represent our best judgment about promising ways to improve our data on labor power and its utilization, it is also clear that a great deal of conceptual and methodological work is needed before a practical and well-integrated survey and analysis program could be proposed for implementation. We do not minimize the difficulty of securing the information called for from survey respondents; we do emphasize the fundamental importance of doing so. Our existing labor force statistics are losing their relevance and, therefore, their value as changes take place in the interrelation of households and family structure with the labor market. The reform we recommend,

drastic though it may appear, seems warranted if we are to retain, let alone improve, our understanding of contemporary labor market phenomena.

The first objective is to get information on current time use of all adult persons, placing primary emphasis on productive uses of time. We propose the following categories among which hours in a sample week can be distributed:

(a) Market work. Paid employment, self-employment, on-the-job-training, unpaid family work if related to income generation, including all related travel time.

(b) Work in the home. Food preparation and marketing, house cleaning, clothing care, maintenance of home and durable goods, and child minding.

(c) Child rearing. Time spent in joint activities with children aged 0-15 years, including transportation, instruction, going to the zoo.

(d) School and other training. This includes travel time, homework, lessons taken by the hour.

(e) Job seeking. Travel time, interviewing, going to the public employment office, union hall, etc.

In connection with category (e), no distinction should be made between those who are currently employed and those who are not. Probing questions (as now) should be asked to determine the nature of the search activities engaged in (registered at public or private agency, answering classified ads, interviewed or called potential employer to follow leads advertised, etc.). These should be followed by questions aimed at the nature of the adjustment

sought--specifically, the pay and benefits sought, and the preferred hours (perhaps followed by how this compares with present or recent pay) with further specification as to whether it refers to a second job or the primary one. This information would make it possible to form a more precise indicator of the amount and distribution of unused labor time represented by behaviorally inferred disequilibrium.

It is sometimes objected that time-use categories are arbitrary and do not segregate conceptually clear types of activity such as leisure/work, or consumption/investment. We grant this arbitrariness but argue that our categories are no less arbitrary than the traditional ones of, say, market work and education. On-the-job leisure is not an unknown category, for example, and consumption, leisure, and investment are all mixed in with schooling.

There has been a great deal of research in recent years both on economic models[20/] of time allocation and on its measurement.[21/] The time is now ripe for serious work on the design of a large-scale survey capable of measuring some additional and critically important dimensions of time use. Much background work has been done and expertise exists to make headway on this challenging problem. Clearly we would now have neither national accounts nor the existing array of labor force statistics if all protests of arbitrariness and measurement difficulty had been heeded.

The second type of data needed is enough information to permit the classification of adults on the basis of their previous paid work experience. We suggest the following categories.

The first five categories all refer to adults aged 21-71 years of age.

(a) Labor force entrants: Those who took their first full-time job within the last three years.

(b) Prime labor force: Those who have worked full-time at least 36 out of the past 60 months.

(c) Inactive adults: Those who have not worked (more than seven hours per week) in the past two years.

(d) Other experienced workers: All others who have worked full time for at least two years (this includes reentrants).

(e) Other workers: The residual in the 21-71 age category. Includes part-time, irregular, and miscellaneous cases who have worked for pay (more than seven hours a week for at least a month) within the last two years.

The last two categories incompass those of other ages.

(f) Youths: Those 16-20 years of age regardless of work experience.

(g) Elders: Those over 72 years of age.

These categories are intended to exhaust the adult population and to provide groups that are meaningfully different in their labor force affiliation.[22/] The categories do not depend on the somewhat subjective and often transitory state of job-seeking activity, but are grounded firmly in past labor market activity. The categories are also not defined by sex or family status, which are becoming increasingly less useful as predictors of labor force behavior. (It will, of course, be useful to examine how sex or household status groups are distributed among these categories.) They use instead the notion that past performance is the best simple predictor of future behavior in the labor market.

Another basis for classification is also important for understanding and monitoring the utilization of labor power. We need to know the distribution of adults by productivity and, therefore, propose that current or most recent wage or earning rate be gathered for this purpose. In terms of categories for tabulation, it would be sufficient to form three groups--low, medium, and high--using half the median wage and twice the median wage to demarcate the intervals. Those with no previous earnings could be assigned to the low category. This information could then be combined with data on excess supply to calculate Perry-type indices for gauging the amount of net productivity represented by those seeking changes in the amount of their paid employment.

The proposed framework would yield a great deal of information that is pertinent for understanding what is happening to labor supply, both in the paid employment sector and in the household sector. By observing movement in time use and excess supply in the various categories of adults it would be possible to make more informed judgments about the losses caused by insufficient demand for labor and about the opportunity costs of policies that affect the allocation of time, both between paid and unpaid activities and among the various categories of unpaid productive time use.

This sort of survey could be carried out within the basic framework of the Current Population Survey (i.e., a monthly survey, with a pattern of reinterviews, of a revolving panel of respondents). But we recommend that a careful study be undertaken to consider whether a substantially different design would be more effective in gathering this type of time use and work experience data. We presume that a statistical basis for monthly, or at

least quarterly reporting, will continue to be required to provide timely indicators of aggregate economic performance. Perhaps the sample size could be decreased if there is a reduced need to provide detailed labor force data on small areas (see Recommendation III below). It should be added that the survey we envisage here does not have to be designed to provide multiyear longitudinal data. It should concentrate on collecting basic data for timely reporting on current labor allocation and utilization. While the data will be useful for a wide range of new analytical purposes, the major design emphasis should be on getting current statistical indicators. The more specialized National Longitudinal Survey samples can continue to be reserved for the analysis of individual and family labor supply behavior over time.

Recommendation III: Small Area Statistics. The problem of monitoring economic performance for detailed geographic areas has not been addressed in the main body of this paper or in the previous recommendations. It is clear that the need for timely local indicators of economic hardship and unemployment is one of the primary reasons for the establishment of this commission. We would like to suggest a wholly separate approach to this problem.

The Food Stamp program is a federal program which is universal in coverage for all and which uses a measure of current hardship for eligibility and size of benefit. We feel that data from the routine administration of this program augmented perhaps by limited additional reporting on the employment of members of beneficiary households provide a very promising source of data on small areas.

The number of units or persons receiving benefits and the total amount of benefits for a given area (such as a zip code area) could be readily used as a direct indicator of local hardship conditions. Even without modification we would conjecture that it is better than other readily achievable measures. At present some variation from place to place in participation rates is strongly indicated, due no doubt to individual behavior and to uneven administrative practice and outreach efforts. It is important to recognize, however, that the use of Food Stamp data as the basis for program and fund allocation decisions would provide a substantial incentive for enthusiastic outreach and enrollment efforts on the part of administrative authorities.

The most careful work on this has been done by Maurice MacDonald using the Michigan PSID data, from which he estimates a participation rate of just under 40%. But his estimates are for 1974.[23/] Since it was not until July 1974 that all counties had to offer Food Stamps, participation rates can be expected to have risen substantially since then. The current participation rate is not known, although it is known that there is substantial underreporting in the CPS of Food Stamp benefits received (as of other transfer income), and estimates of Food Stamp eligibility from CPS Income Supplement data requires some very tenuous assumptions.

SIPP is aimed precisely at the problem of securing more accurate estimates of program participation and would, with or without the modifications we have suggested in Recommendation I, provide a basis for inferring the relationship between administrative data and a broad range of indicators. These relationships would then enable imputations for small areas to be made

on a current basis with the discipline that the allocation produced be constrained to add up to the totals as measured by the national survey. If we can measure the total misery, in other words, by the national survey we can allocate it by means of the local area data.

We are not suggesting that the Food Stamp program data as currently collected provide adequate local area information. Clearly there are at present no adequate data at the local area level. What we are suggesting is that the Food Stamp program is a universal, uniform, countrywide income-conditioned transfer program--the only one in this country. Legislation passed in 1973 prohibits any local discretion in eligibility criteria, benefit levels, or regulations. This seems to us the prime place to go in search of local area statistics that are comparable across the country. There is a ready-made administrative structure in place, already collecting data. To the extent the data need supplementation, the procedures are sloppy, or the data collection forms idiosyncratic, it is almost certainly less expensive to iron out these problems in a functioning system than to mount a major new survey large enough to achieve precision at the local level.

The basic criterion used for Food Stamp eligibility is similar to (although somewhat higher in level than) the poverty criterion. The size of benefits is related directly to the gap between a unit's income resources and the eligibility limit so that the size of benefit can be used to infer gradations of hardship. While it is always possible to quarrel with any specification of hardship, this one at least reflects recent legislative authority. At some cost in additional data processing, the same data for enrolled units could be used for calculating local hardship for various income cutoff levels.

We have so far spoken about a local area basis for the disbursement of funds designed to alleviate economic hardship. If the funds to be dispersed are for job programs for the unskilled, the Food Stamp data could also yield estimates of the extent to which the low income population who want jobs are unemployed.

On the problem of full-spectrum employment and unemployment estimates for local areas, the Food Stamp data could also play a useful role. At present, the UI program is the only nonsurvey basis we have for assessing local labor market conditions, but it suffers severely from lack of homogeneity among states, in addition to more localized variations in administration and employee behavior. Another major criticism of UI data derives from its lack of coverage for low-wage and secondary market jobs. The Food Stamp data could provide an important new indicator that could be combined with UI, and perhaps other local data, to provide an adequately sensitive set of local labor market indicators. Again the SIPP promises to provide the basic data necessary for calibrating and validating such estimates.

Finally, it would be possible to mandate all jurisdictions to get additional information about employment status from Food Stamp participants. This would permit monitoring the role of unemployment in fluctuations in the local hardship measure and could be used to direct employment program funds to areas where they would have maximum benefit. The emphasis in the newest Food Stamp amendments on the importance of making the work test effective ought to lead to substantially more care going into the collection of data on job search, etc., activities of recipients.

It has been proposed that the Food Stamp program be eliminated and this might seem to place a local area statistical program on a shaky footing. But proposed reform alternatives are also nationally uniform income-tested programs which could provide a similar data base. It seems highly unlikely that a program with as much acceptance as Food Stamps will be dismantled without the substitution of program with similar coverage and potential for providing useful statistical by-products for local areas.

* * * * *

Altogether, these recommendations flow from three basic notions. One is that, in view of current social reality, hardship or low levels of economic well-being and the state of utilization of our labor force are distinct phenomena that deserve separate measurement. The second is that important advances in both concept and method have left our current measuring instruments well behind the state of the art. The third is that for the important task of monitoring local hardship and employment conditions making the best use of program reporting data collected on a current basis is more economical in both budget and public nuisance than would the alternative of a new sample survey capable of equivalent precision.

By taking maximum advantage of the potential of a national program of universal eligibility for providing virtually continuous observations on small areas, the major surveys can concentrate on those details which are very expensive to collect on a mass basis. Our suggestions for a longitudinal survey focusing on hardship could be readily meshed with the objective of SIPP and could perhaps serve the needs for national or large region data on

the basis of a substantially smaller (25,000) sample than projected for SIPP. Our proposals for the labor market survey can be interpreted either as a replacement for the CPS or as specifications for its substantial redirection. Again, it is possible that a new sample design could reduce the total size of the CPS at least enough to offset possible costs of a more detailed instrument. It does not seem likely to us, therefore, that our recommendations taken together are more costly than alternatives which promise equal precision at the local level.

We recognize that substantial work will need to be done to turn these recommendations into practice and would not be surprised to learn that better alternatives exist for some of our more detailed suggestions. But we do feel strongly about the validity of the basic premises upon which these recommendations are made and that any proposed reforms must come satisfactorily to terms with them.

FOOTNOTES

[1]The Census Bureau uses the descriptors "multiperson household" and "family" almost interchangeably. We prefer to make a more careful distinction to allow reflection of the fact that substantial, and we suspect increasing, income dependence between households exists along (extended) family lines. Failing to take account of these interhousehold intrafamily transactions yields a misleading picture of the distribution of economic well-being. Thus, what the Census refers to as a "family" we prefer to call "multiperson household" or "household" where the meaning is clear. The point is that such aggregations of people share a living unit. We reserve the word "family" to mean a collection of people related by blood, adoption, marriage, or former marriage whether or not they live together. It should be noted that we are not proposing that the family so defined be used as the unit of sampling or survey observation. See Harold Watts and Felicity Skidmore, "Household Structure: Necessary Changes in Categorization and Data Collection" (paper prepared for the Census Bureau Conference on Issues in Federal Statistical Needs Relating to Women. Bethesda, Maryland, April 27-28, 1978). Columbia University Center for the Social Sciences Discussion Paper 78:5:5 #10.

[2]This is the percentage of first marriages for those born 1945-49 predicted to end in divorce. Paul C. Glick and Arthur J. Norton, "Marrying, Divorcing and Living Together in the U.S. Today," Population Bulletin, 32:5 (October 1977).

[3]The trends in marital disruption by death (down) have combined with the divorce trends to keep the percentages of ever-married women living with their first husbands fairly constant over this century--at about 70% for those aged 45-49 years, about 65% for those aged 50-54, and about 55% for those aged 55-64. Projections are that the divorce rate effect will begin to dominate the death rate effect by the 1990 Census. See Mary Jo Bane, Here To Stay: American Families in the Twentieth Century (New York: Basic Books, 1976), pp. 30-31.

[4]Bane, Appendix Table A-4 and footnote (e) to that table.

[5]Fred Best and Barry Stern, "Education, Work, and Leisure: Must They Come In That Order?," Monthly Labor Review (July 1977).

[6]1975 appears in our statistics on youth instead of 1976 because the 1976 figures are not available in the 1977 Employment and Training Report for the breakdowns we need.

[7]This may be truer for whites than blacks. Black youths' labor force participation rates have recently been declining. The Bureau of Labor Statistics monthly labor force survey is finding that, according to their

mothers, a lot of these young blacks are in school. Julius Shiskin, "The Labor Market: Matching Up the Statistics and the Realities," Challenge, 20:6 (January/February 1978).

[8]Richard B. Freeman, "Over-investment in College Training?," Journal of Human Resources (Summer 1975).

[9]U.S. Department of Health, Education, and Welfare, The Measure of Poverty: A Report to Congress as Mandated by the Education Amendments of 1974 (Washington, DC: April 1976), p. 98.

[10]Ibid., p. 32.

[11]The cash equivalent transfers included were from housing programs, Medicaid, Medicare, and Food Stamps. Robert D. Plotnick and Felicity Skidmore, Progress Against Poverty: A Review of the 1964-1974 Decade (New York: Academic Press, 1975), p. 174.

[12]The Measure of Poverty, p. 32.

[13]Ibid.

[14]For discussion of this issue see Clair Vickery, "The Time-Poor: A New Look at Poverty," Journal of Human Resources, 12:2 (Winter 1977).

[15]This cost is conceptually different and should not be confused with the budgetary cost of programs that pay benefits to relieve the economic hardship caused by the unemployment.

[16]For those who are currently unemployed, the last observed wage rate corrected for subsequent inflation is the appropriate measure.

[17]The single exception, as we noted in section 2 of the paper, is the problem of establishing equivalence between households in which the parent (or other adult) responsible for the care of children is working in the labor market and households in which that parent is working only in the home. This is a difficult conceptual problem which is only just beginning to be researched, so we have no specific recommendation for improvement. Again, see Vickery, "The Time-Poor."

[18]Theoretically, in-kind benefits should include all "public goods." We suggest, however, that the survey only concern itself with those benefits that have substantially different impacts across households. Most income-tested programs fall under this category and also the age-related benefits such as education.

[19]The five-year time frame is to some degree arbitrary. The following considerations guided our choice. Conceptually one would like to have a lifetime. One year seems entirely too short to average out substantial variations in income and circumstance. Ten years seems too long because of attrition and sample representativeness problems. Five years falls in between. In principle, five-year recall data should provide the same information cheaper. In practice, as is very generally recognized, recall data in any detail over any substantial length of time are of very poor quality.

[20]See, for example, Gilbert R. Ghez and Gary S. Becker, The Allocation of Time and Goods Over the Life Cycle (New York: National Bureau of Economic Research, 1975).

[21]See F. T. Juster, ed., Studies in the Measurement of Time Allocation (Ann Arbor: Institute for Social Research, University of Michigan, 1978); and K. E. Walker and M. E. Woods, Time Use: A Measure of Household Production of Family Goods and Services (Washington, DC: The Center for the Family, American Home Economics Association, 1976).

[22]If the small area statistics are handled differently, as suggested in Recommendation III, there seems no particular reason, given the volunteer army, to treat the armed forces as a special category.

[23]Maurice MacDonald, Food, Stamps, and Income Maintenance (New York: Academic Press, 1977), p. 95.

BIBLIOGRAPHY

Bane, Mary Jo. Here To Stay: American Families in the Twentieth Century. New York: Basic Books, 1976.

Becker, Gary S. and Nigel Tomes. "Child Endowment and the Quantity and Quality of Children." Journal of Political Economy, 84:4(2) (August 1976), pp. 143-162.

Bell, Carolyn S. "Basic Data and Economic Policy." Challenge, 20:5 (November/December 1977), pp. 43-49.

Best, Fred and Barry Stern. "Education, Work, and Leisure: Must They Come In Order?" Monthly Labor Review (July 1977), pp. 3-10.

Freeman, Richard B. "Over-investment in College Training?" Journal of Human Resources, 9:2 (Summer 1975).

Ghez, Gilbert R. and Gary S. Becker. The Allocation of Time and Goods Over the Life Cycle. New York: National Bureau of Economic Research, 1975.

Glick, Paul C. and Arthur J. Norton. "Marrying, Divorcing and Living Together in the U.S. Today." Population Bulletin, 32:5 (October 1977).

Gronau, Reuben. "Leisure, Home Production, and Work--The Theory of the Allocation of Time Revisited." Journal of Political Economy, 85:6 (December 1977), pp. 1099-1124.

Juster, F. T. "A Framework for Measurement of Economic and Social Performance," in Milton Moss (ed.), The Measurement of Economic and Social Performance. Studies in Income and Wealth, No. 38. New York: National Bureau of Economic Research, 1973.

_____ (ed.). Studies in the Measurement of Time Allocation. Ann Arbor: Institute for Social Research, University of Michigan, 1978.

Keniston, Kenneth, et al. All Our Children: The American Family Under Pressure. New York: Harcourt, Brace, Jovanovich, 1977, chapters 5 and 6.

Levy, Frank. "How Big Is the American Underclass?" Urban Institute Working Paper 0090-1. Washington, DC: The Urban Institute, September 1977.

Liebowitz, Arlene. "Home Investments in Children." Journal of Political Economy, 82:2(2) (March/April 1974), pp. 111-131.

MacDonald, Maurice. Food, Stamps, and Income Maintenance. New York: Academic Press, 1977.

Moon, Marilyn and Eugene Smolensky (eds.). Improving Measures of Economic Well-Being. New York: Academic Press, 1977.

Morgan, James N., et al. Productive Americans. Survey Research Center Monograph No. 42. Ann Arbor: Institute for Social Research, University of Michigan, 1966.

Norwood, Janet L. "New Approaches to Statistics on the Family." Monthly Labor Review (July 1977), pp. 31-34.

Plotnick, Robert D. and Felicity Skidmore. Progress Against Poverty: A Review of the 1964-1974 Decade. New York: Academic Press, 1975.

Reaching Retirement Age: Findings From a Survey of Newly Retired Workers 1968-70. Research Report No. 47. Washington: Social Security Administration, 1976.

Ross, Heather L. and Isabel V. Sawhill. Time of Transition: The Growth of Families Headed by Women. Washington, DC: The Urban Institute, 1975.

Shiskin, Julius. "The Labor Market: Matching Up the Statistics and the Realities." Challenge, 20:6 (January/February 1978).

Sirageldin, I. A. Nonmarket Components of National Income. Ann Arbor: Survey Research Center, University of Michigan, 1969.

Tobin, James and William Nordhaus. "Is Growth Obsolete?," in Milton Moss (ed.), The Measurement of Economic and Social Performance. Studies in Income and Wealth, No. 38. New York: National Bureau of Economic Research, 1973.

U.S. Department of Health, Education, and Welfare. The Measure of Poverty: A Report to Congress as Mandated by the Education Amendments of 1974. Washington, DC: April 1976.

Vickery, Clair. "The Time-Poor: A New Look at Poverty." Journal of Human Resources, 12:1 (Winter 1977), pp. 27-48.

Walker, K. E. and M. E. Woods. Time Use: A Measure of Household Production of Family Goods and Services. Washington: The Center for the Family, American Home Economics Association, 1976.

Watts, Harold W. and Felicity Skidmore. "Household Structure: Necessary Changes in Categorization and Data Collection." Paper prepared for the Census Bureau Conference on Issues in Federal Statistical Needs Relating to Women. Bethesda, Maryland, April 27-28, 1978. Columbia University Center for the Social Sciences Discussion Paper 78:5:5 #10.

Janice Fanning Madden
University of Pennsylvania

The Watts and Skidmore paper makes two major points:

(1) Since household income is not restricted to the earnings of one individual, economic hardship cannot be measured by labor force statistics. Arguing that the poverty count is the appropriate measure of economic hardship, Watts and Skidmore recommend the collection of more detailed data on unearned household income and on taxes to improve the accuracy of the poverty count.

(2) Due to shifts in the demographic composition of the labor force and in the life cycle timing of education-work-retirement, the use of traditional employment and unemployment statistics to measure the social costs of underutilization is no longer valid. The alternative to paid work is not solely idleness, but includes productive activities such as schooling, housework, job search, etc. The social costs of underutilization of workers depends on the social benefits of the activities in which the individual engages in lieu of market work. To fill these data needs, Watts and Skidmore recommend the regular collection of data on the productive uses of time by adults classified according to previous employment history.

Although Watts and Skidmore include a final recommendation that the data collection capabilities of the food stamp program be utilized to provide hardship indicators in small geographic areas, they do not analyze this issue in any detail in their paper and it will not be discussed further here.

My comments focus first on the issues raised by economic hardship measurement and, second, on the case for time use data and the methodological problems involved in its collection.

Watts and Skidmore build an irrefutable case that a poverty count which includes all resources available to the household in the computation of income is a more appropriate device for measuring economic hardship than employment and unemployment statistics which include only earnings as an income measure. However, labor force statistics and poverty count statistics also differ with respect to the unit over which

hardship is measured. Labor force statistics are aggregated over individuals while the poverty count is currently aggregated over households. Obviously, the appropriateness of using the individual or the household as the unit of analysis depends on the purposes for which a hardship measure is used, and not on whether labor force statistics or the poverty count are used as the hardship indicator. As Watts and Skidmore's silence on this issue seemingly implies approval of household unit measurement of economic hardship, the alternative of individual unit measurement requires further discussion.

In general, it is desirable that an indicator of economic hardship increases as one's economic ability to consume goods and services decreases. Although earnings are tied to specific household members, the goods and services it purchases are shared by all household members. Therefore, the amount of goods and services consumed by individuals and their exposure to economic hardship depends on their household structure as well as their own earnings. However, the tremendous volatibility in household composition documented by Watts and Skidmore indicates that adults exercise a large degree of choice in determining their household structures. The size of one's family and the characteristics of one's spouse are part of the individual's consumption decision. To classify one individual in economic hardship and another not so because the former has chosen more children or a different spouse while both have the same ability, skills, and earnings is indefensible if children and spouse are a good chosen by the individual.

Similarly, defining a low earning individual as not in economic hardship because he or she lives with higher earning individuals is misleading. For example, an unemployed teenager who lives in a three-person household which has an annual income of $8,000 is above the poverty line due to the income accruing to other household members. If she takes a job paying $2,500 a year and decides to set up a separate residence, she is now below the poverty line and in "economic hardship." Yet, since the move from the former household was voluntary, the teenager is clearly better off in the latter situation. The moral of the story is that economic hardship measures should reflect the <u>size</u> of the individual's choice or opportunity set and not the actual choices made <u>within</u> that set. Since household structure is part of the actual choices

made by adults, it is inappropriate to define their economic hardship assuming household structure is a given. (Of course, since children do not choose the households in which they live, measures of their well-being or economic hardship must clearly control for household composition). For adults, economic hardship measures should reflect the economic power of the individual to make choices, not the household structure selected. Only the individual's personal income, and not household income, determines the size of the choice set.

If an indicator of economic hardship is meant to reflect the individual's economic capacity to consume goods and services and if the household structure is viewed as a part of the individual's consumption decision, then the increase in multi-earner households described by Watts and Skidmore does not undermine the use of labor force statistics to reflect economic hardship. However, the expansion of government and private transfer payments does create problems since earnings understate income for those individuals who share in such transfers. The Watts and Skidmore recommendation to improve measurement instruments for these income sources is a necessary step to developing economic hardship indicators. The clear necessity of accounting for this unearned income demonstrates that economic hardship is not measured either conceptually or actually by labor force statistics and, therefore, should not be of concern in developing and collecting employment and unemployment data. On the other hand, the measurement of economic hardship experienced by adults cannot be derived from a poverty count using a poverty line defined for households. The poverty count for adults must be based on a poverty line defined for individuals.

The second Watts and Skidmore recommendation--collecting data on non-market uses of time--is premature since the case for doing so is based on somewhat speculative notions of the changing nature of the labor force, and the methodology for collecting and interpreting time use data is far from being perfected.

Although Watts and Skidmore argue that there is growing variation in the traditional life cycle progression of education-work-retirement, the evidence they present does not warrant this conclusion. First, the increasing proportion of youth combining education and work does not

reflect more "groping around" among youth, but rather that a larger proportion of the enrolled are either from poorer families or from larger families,[1] making it necessary for them to contribute financially to their own schooling costs. Second, there is no evidence that the increase in two-earner, or even two-career, marriages or the expansion of adult education programs encourages weaker work attachment among mid-life adults. Finally, the increasing likelihood that younger workers would want to increase the incentives for older workers to stay in the labor force as older persons become a larger share of the population implies that retirement may be delayed, but not that it would precede work or education in the life cycle progression. While a breakdown in the usual education-work-retirement life cycle progression is purely speculative, knowledge of the extent of non-market productive uses of time is also of interest to evaluations of the costs of underutilization of the labor force, to the analysis of labor force participation decisions, and to the projection of labor force size. However, measurement of non-market productivity is extremely difficult because the output of unpaid work is not subject to explicit pricing or even physical measurement. Therefore, the only alternative is to measure and categorize time inputs to these activities in the fashion suggested by Watts and Skidmore. Time budget data is difficult to interpret for several reasons:

(1) The division between leisure (time which has no "productive value" to anyone other than the participant) and productive work is extremely vague. For example, floor scrubbing is usually considered productive work, but if a person scrubs a floor daily for her own satisfaction while other members of the household cannot distinguish "daily-scrubbed" floors from "weekly-scrubbed" floors, six-sevenths of floor scrubbing time is leisure. While paid work may also have a large leisure component, the wage rate provides an indication of its productive value to others.

(2) Both productive and leisure activities are often conducted simultaneously, creating classification problems in time budget studies which are usually resolved by listing only the respondent-deter-

[1] Live-birth order peaked in 1955 indicating that 20-year-olds in 1975 were more likely to come from larger families than 20-year-olds in any other time periods.

mined primary activity. If the decison as to which activity is primary systematically varies by population subgroups (so that fathers combining child care with television viewing indicate that television viewing is their primary activity while mothers performing the same functions report child care as their primary activity), then it will be difficult if not impossible to sort out differences in time use patterns among the groups listed by Watts and Skidmore.

(3) Time budget data based on respondent recall and/or reporting is subject to such extreme rounding errors that differences among population groups in their time use patterns are likely to be significantly understated. The alternative of having an interviewer observe the time use patterns is expensive and also likely to induce experimental bias.

Because the collection of time use data poses major conceptual problems, a recommendation to collect such data on a large scale is premature. However, its potential relevance to a wide range of labor market issues warrants further research on these methodological issues and the continuing collection of smaller experimental data sets.

DO NOT FILM THIS PAGE

Lee Rainwater
Harvard University

I would strongly endorse the first two of the authors' recommendations for improved measurement methodology: a longitudinal survey to include measures of economic hardship and a survey to measure employment and unemployment in the broader context of time use.

My own research experience does not qualify me to comment on the third recommendation concerning small area statistics. I will comment on some of the areas of disagreement with the analysis by which the authors arrive at these recommendations, but these areas of disagreement are not crucial to their line of reasoning with reference to ways measurement can be improved.

The first section of the paper provides an excellent review of major trends in family patterns and behavior and the implications of these for trends in family income and family labor supply. There have, indeed, been major changes in how Americans choose to arrange their family relations over the life course and in how family roles are defined by the family members involved and by society more generally . These changing family patterns have and will continue to have very important implications for conceptions of economic hardship and equity and for demands that people make on the economy for employment.

I do think that there is considerably more hyperbole than warranted in the assertion that "the relationship between individual earnings and household income has broken down"--especially if one takes seriously the concept of permanent income. For families in the middle of the life course (age 25-34), some 70 percent of the total variation of income is still attributable to the earnings of men. Easily 80 percent of the total variation of income is associated with asset income and the earnings of the principal wage earner. If one takes into account the fact that a good deal of income of older families is related to deferred income in the form of pensions and savings, the role of earnings can hardly be said to have been more than moderated by the rise of other kinds of family income sources.

I have much the same kind of problem with the authors' assertion that the link between unemployment and economic hardship (measures) should be broken. To my mind, issues of poverty and low income are, in

this country at least, already too divorced from considerations of labor market dynamics. Economic hardship is not a separate issue from those of labor force participation, but is, instead, a consequence of patterns of labor force participation. The complexities of measuring economic situations well certainly does make it reasonable to think of two different kinds of surveys, but there should be no confusion that conceptually, economic hardship, unemployment and labor force participation are all integrally linked parts of a person's position in the system of social stratification.

The authors' review of major family trends--increased labor force participation of women, the rising proportion of two-earner families, the increasing volatility of family composition, and the growing variation in behavior at particular life cycle states--draws attention to the many policy areas impacted by these changes. Reasonable adaptations by public policy to these changes will require more precise information about labor force activity and family income packaging than is now available.

The suggested expansion of the current income measure which provides the basis for assessing economic hardship is long overdue. I would emphasize a particular problem with the inclusion of in-kind benefits. If the cash value (or anything approaching the cash value) of some public in-kind benefits is included, one would markedly bias upward the economic well-being of the poor. For example, it is not at all clear that much of the medical care received under Medicare and Medicaid programs represents an addition to the economic well-being of the families involved. Indeed, there is reason to believe that more than a small proportion of "patients" are serving more as resources in the production of income to medical institutions and practitioners than as persons being benefited. It is possible to make adjustments to aggregate amounts for the lost efficiency of in-kind transfers; but it is hard to know how that kind of imputation could be handled at the individual level.

On the other hand, the inclusion of private in-kind benefits is problematic only in connection with the difficulty of measuring these benefits. It is unlikely that more than a few individuals know the cash equivalent of in-kind benefits which they receive from their jobs. The

increasing importance of fringe benefits in economic well-being over the life course probably justifies the extra effort that would be involved in collecting directly from employers accurate information on job-related benefits of persons in the sample survey. (This might be done once during the participation of the family in the panel.

I would feel more comfortable about the stress the authors put on inter-houshold transfers if there were some evidence of how large these loom in the aggregate. Such data are available from the Panel Study of Income Dynamics; my impression is that inter-household transfers are an important source of income for only very few fammilies. For persons in particular situations of acute hardship, however, such transfers may be very important. Rather than expend a great deal of effort measuring inter-household transfers for everyone, analytic understanding of how family transitions are managed might be better improved by concentrating attention in surveys on persons who have recently experienced such a transition.

The recommendation to include labor force participation and unemployment measures within a more comprehensive time-use perspective would represent an innovative and extremely useful departure from current practice. I would add one additional category to the authors' five categories of productive time use. This would involve participation in voluntary community activities. Such activities represent an important portion of the social product and deserve to be measured along with the more directly family-centered categories which the authors mention. It is of course understood that there are conceptual ambiguities in the extent to which voluntary community activity should be considered productive versus pure consumatory leisure.

As a behavioral scientist I must note the unfortunate intrusion of disciplinary blindness in the authors' assertion that "analysis of how human capital is developed is only just beginning, but it is already clear that it needs substantial inputs of time." Interest in issues of child development by anthropologists, psychologists, sociologists and biological scientists has a long history, and much is understood about how human capital is developed. It would be a shame if economics set about re-inventing that particular wheel.

The paper's analysis is, I think, weakened rather than strengthened by a reliance on the human capital perspective. Thus, the authors' slide too easily from the assertion in the body of the paper that the value to the market economy of a loss of potential workers' effort is equal to the value of the product lost to the assertion in the executive summary that the labor market value of a worker to society depends not on the fact that he is offering to contribute productive time, but on the value of that time as reflected by the wage rate he can command. I am certainly not willing to accept as technically correct, let alone approve, the idea that the wage rate of an account executive in charge of a cigarette advertising account is a measure of his labor market value to society, though I'm quite willing to accept it as a measure of his labor market value to this agency and the manufacturer.

There are still, and will undoubtedly be for quite some time to come, alternative theories, with at least as much empirical evidence in their favor, to the marginal productivity theory of wages. The authors seem tempted to argue that improved measurement of labor market resources should be derived from a particular conceptual approach. I would argue instead that measures of labor market resources should be so designed as to provide evidence that could be useful in testing the validity for particular hypotheses of contending theories about labor market behavior and wage determination. Thus I don't find the assertion that the chronic economic hardship associated with low wages is evidence of under-developed human capital rather than an underutilized current labor resource unambiguous. The new time-use survey which the authors recommend should be so designed that it measures a wide range of characteristics of individuals and their situation and not primarily those whose importance might be deduced from marginal productivity theory.

The authors' emphasis on highly varied patterns of labor force participation over time (full-time, part-time, in and out, etc.) which in turn are distributed widely, if not randomly, across social categories of potential workers, demonstrates forcefully the importance of the kind of innovations in labor market surveys for which they argue and also the importance of more suitable categories for standard tabulations.

The authors note the artibrariness of the concept of an absolute poverty level, but in the end they argue that such a measure should be continued. I very much disagree. Not only is such a measure arbitrary, but it becomes increasingly misleading as a public policy guide as the poverty line departs more and more from the common understandings citizens have of what low income means. Changes in "poverty" then become more changes in those who are marked off by an arbitrary line than changes in the phenomenon the poverty measure was supposed to index. The fact that there is now a tremendous problem created because of the use of the poverty line for various kinds of eligibility requirements should not be converted from a political problem to an intellectual principle. (Indeed, there may be a connection between the potentialities of a poverty line that is almost twenty years old for misleading us in our understanding of poverty as a social phenomenon and the empirical considerations that lead the authors to their argument that, particularly with respect to poverty, the relationship between earnings and family income has broken down.) There is no reason that a new survey directed to the measurement of economic hardship could not include as a variable and as a standard category for tabulations, a measure of the ratio of the (family-size adjusted) income of households to the median (family-sized adjusted) income. The current poverty line in many ways trivializes the problem of poverty, and, at least for analytic work, should be abandoned.

BACKGROUND PAPERS OF THE
NATIONAL COMMISSION ON EMPLOYMENT AND UNEMPLOYMENT STATISTICS

- STATE AND LOCAL LABOR FORCE STATISTICS, Background Paper No. 1, May 1978
- ESTABLISHMENT REPORTING IN THE UNITED STATES, Background Paper No. 2, May 1978
- JOB VACANCY STATISTICS IN THE UNITED STATES, Background Paper No. 3, May 1978
- RURAL EMPLOYMENT AND UNEMPLOYMENT STATISTICS, Background Paper No. 4, May 1978
- A COMPARISON AND ASSESSMENT OF SEASONAL ADJUSTMENT METHODS FOR EMPLOYMENT AND UNEMPLOYMENT STATISTICS, Background Paper No. 5, February 1978
- LONGITUDINAL SURVEYS AND LABOR MARKET ANALYSIS, Background Paper No. 6, July 1978
- EMPLOYMENT AND UNEMPLOYMENT STATISTICS AND THE CETA PRIME SPONSOR, Background Paper No. 7, March 1978
- MEASURING TYPES OF UNEMPLOYMENT: IMPLICATIONS FOR UNEMPLOYMENT STATISTICS, Background Paper No. 8, June 1978
- MICROECONOMIC ASPECTS OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS, Background Paper No. 9, March 1978
- EMPLOYMENT AND UNEMPLOYMENT STATISTICS IN COLLECTIVE BARGAINING, Background Paper No. 10, June 1978
- GROSS CHANGE DATA: THE NEGLECTED DATA BASE, Background Paper No. 11, July 1978
- THE MEASUREMENT, BEHAVIOR, AND CLASSIFICATION OF DISCOURAGED WORKERS, Background Paper No. 12, June 1978
- LABOR FORCE CONCEPTS AND DEFINITIONS IN VIEW OF THEIR PURPOSES, Background Paper No. 13, March 1978
- LABOR SUPPLY AND SOCIAL WELFARE BENEFITS IN THE UNITED STATES, Background Paper No. 14, November 1978
- SOME SOURCES OF ERROR IN LABOR FORCE ESTIMATES FROM THE CURRENT POPULATION SURVEY, Background Paper No. 15, August 1978
- THE IMPLICATIONS OF CHANGING FAMILY PATTERNS AND BEHAVIOR FOR LABOR FORCE AND HARDSHIP MEASUREMENT, Background Paper No. 16, June 1978
- AN EVALUATION OF UNEMPLOYMENT DATA NEEDS IN MACRO MODELS, Background Paper No. 17, November 1978
- THE ADEQUACY OF OCCUPATIONAL DATA ON EMPLOYED AND UNEMPLOYED WORKERS FOR ANALYZING LABOR MARKET BEHAVIOR, Background Paper No. 18, June 1978

☆ U.S. GOVERNMENT PRINTING OFFICE : 1979 O—281-412 (157)